

REMARKS

Claim rejections under 35 USC 103

The claimed invention has been rejected under 35 USC 103(a) as being unpatentable over Ishii (5,571,366) or the Admitted Prior Art (APA) in view of Ishii, with either of these further in view of Somekh (5,643,366), or Brors (EP 0276061). Claims 1 and 12 are independent claims, from which the other of these claims that have not been cancelled ultimately depend. Applicant has amended claims 1 and 12 to better clarify their subject inventions, and submits that as amended, claims 1 and 12 are not obvious. Applicant therefore now specifically discusses the patentability of claims 1 and 12, but notes that the other of these pending claims are patentable over Ishii for at least the same reasons that claims 1 and 12 are.

In the previous office action response, Applicant amended claims 1 and 12 so that they were limited to 1) the wafer resting on an inner top surface of the bottom of the wafer lifter that is *parallel to* an outer bottom surface of the bottom of the wafer lifter; and, 2) the inner top surface and the outer bottom surface of the bottom of the wafer lifter being *perpendicular to* the sidewalls of the wafer lifter that define the first diameter greater than the diameter of the wafer. Applicant had contended that these features were not found in either Somekh or Brors, such that Ishii or the APA in view of Ishii, with either of these further in view of Somekh or Brors did not render the claimed invention unpatentable.

In response, the Examiner pointed to a portion of the inner top surface in Somekh on which the wafer rests that is parallel to the outer bottom surface of the wafer lifter. Similarly, the Examiner pointed to a portion of the wafer lifter in Brors in which both the inner and the outer surfaces are perpendicular to the sidewalls of the wafer lifter. On the basis, the Examiner sustained his rejection of the claimed invention.

Applicant, therefore, has amended claims 1 and 12 so that the inner top surface is *completely parallel as a whole* to the outer bottom surface, and that the inner top surface and the outer bottom surface are *completely perpendicular as a whole* to the sidewalls of the wafer lifter. Therefore, Applicant contends that the claimed invention is now patentable. It is not enough that

a *portion* of the inner top surface in Somekh is parallel to the outer bottom surface of the wafer lifter; the claimed invention is limited to the inner top surface being *completely* – not *partially* – parallel to the outer bottom surface of the wafer lifter. Similarly, it is not enough that a *portion* of the wafer lifter's sidewalls are perpendicular to the inner and the outer surfaces in Brors; the claimed invention is limited to these surfaces being *completely* – not *partially* – perpendicular to the wafer lifter's sidewalls.

The discussion that follows shows in more detail how the various surfaces in Somekh and Brors are not *completely parallel as a whole* and/or are not *completely perpendicular as a whole* as recited in the claimed invention. However, the takeaway point here is what has been described in the previous paragraph: Somekh and Brors disclose some surfaces that are *partially parallel* and/or *partially perpendicular*, such that they cannot read on the claimed invention, which discloses the surfaces in question being *completely parallel as a whole* and/or *completely perpendicular as a whole*. As such, Ishii in view of Somekh or Brors, or APA in view of Ishii and further in view of Somekh or Brors, does not render the claimed invention obvious.

With respect to Somekh, the relevant figures are FIGs. 3C and 3D, in which the wafer 139 is resting on the bottom of the wafer lifter 76. As with Taniguchi, however, the inner top surface of the wafer lifter 76 on which the wafer 139 directly rests is *not completely parallel as a whole* to the outer bottom surface of the wafer lifter 76, because one portion of the inner top surface of the wafer lifter 76 is angled downwards towards the outer bottom surface thereof. Furthermore, the inner top surface of the wafer lifter 76, because one portion of it is angled downwards towards the outer bottom surface of the wafer lifter 76, is *not completely perpendicular as a whole* to the sidewalls of the wafer lifter 76.

With respect to Brors, the relevant figure is FIG. 14, in which the wafer 232 is resting on the bottom of the wafer lifter 234. The inner top surface and the outer bottom surface of the bottom of the wafer lifter 234 are parallel to one another in Brors. However, at least a portion of the bottom of the wafer lifter 234 (including its inner top surface and its outer bottom surface) is angled upwards as compared to the sidewalls of the wafer lifter 234. Therefore, the inner top surface and the outer bottom surface of the bottom of the wafer lifter 234 are *not completely*

*perpendicular as a whole* to the sidewalls of the wafer lifter 234, even if one or more portions of these surfaces are perpendicular to the sidewalls – the surfaces as a whole are not *completely perpendicular as a whole*.

Conclusion

Applicant has made a diligent effort to place the pending claims in condition for allowance, and request that they so be allowed. However, should there remain unresolved issues that require adverse action, it is respectfully requested that the Examiner telephone Randy Tung, Applicants' Attorney, at 248-540-4040, so that such issues may be resolved as expeditiously as possible. For these reasons, this application is now considered to be in condition for allowance and such action is earnestly solicited.

Respectfully Submitted,

A handwritten signature in black ink, consisting of a large, stylized loop followed by a horizontal line and a small flourish.

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Randy Tung (31,311)